



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,876	07/03/2001	Russell C. Brown	TT3868	2208
33438	7590	01/21/2005	EXAMINER	
HAMILTON & TERRILE, LLP P.O. BOX 203518 AUSTIN, TX 78720			NGUYEN BA, HOANG VU A	
			ART UNIT	PAPER NUMBER
			2122	

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/898,876

**Applicant(s)**

BROWN ET AL.

**Examiner**

Hoang-Vu A Nguyen-Ba

**Art Unit**

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-25 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to the amendment filed October 22, 2004.
2. Claims 1-25 remain pending.

### ***Response to Amendments***

3. The objection to the Specification because of a non-descriptive title is hereby withdrawn in view of Applicants' amendment to the title to make it more clearly indicative of the invention to which the claims are directed.
4. The rejection of claims 1-25 under 35 U.S.C. § 112, second paragraph as being indefinite is withdrawn in view of Applicants' persuasive arguments.

### ***Response to Arguments***

5. Applicant's arguments filed October 22, 2004 have been fully considered but they are not persuasive. Following is the Examiner's response to Applicants' arguments.

a. Rejection of claims 1, 14, 15 and 16 under 35 U.S.C. § 101:

- i. Claims 1, 14 and 15:

Applicants' arguments:

Claim 1 has been amended to specifically claim a "system." Additionally, claim 14 is directed to a "factory system" and claim 15 is directed to a "domain application." Each of these claims includes elements that set forth the structure of the system, factory system or application as the case may be. Accordingly, these claims define a useful machine as prescribed by identifying the physical structure of the machine.

Examiner's response:

Applicants' amendments to the preamble of claim 1 and associated arguments as well as the arguments in response to the rejection of claims 14 and 15 are not sufficient and persuasive.

In claim 1, the limitation "system" is not clearly defined in the specification to be a system of software and hardware components. Therefore, claim 1 is now rejected under 35 U.S.C. § 112, first paragraph. Even assuming *arguendo*, that the specification does support this limitation, structure will not be read into claim 1 for the purposes of the statutory subject matter analysis.

In claim 14, the "factory system" is described in the specification to be a single system that controls product flow and equipment usage (page 2, lines 17-18). As best understood by the Examiner, this factory system can be totally software-based (e.g., workflow software which is computer program per se) and as such is not a practical application that produces concrete and tangible results as required by State Street. Even assuming *arguendo*, that the factory system is a combination of software-hardware components, structure described in the specification will not be read into claim 14 for the purposes of the statutory subject matter analysis.

In claim 15, the "domain application" is described in the specification at page 2, lines 25-30. As best understood by the Examiner, this domain application can be totally software-based (e.g., computer program per se) and as such is not a practical application that produces concrete and tangible results as required by State Street. Even assuming *arguendo*, that the domain application is a combination of software-hardware components, structure described in the specification

will not be read into claim 15 for the purposes of the statutory subject matter analysis.

ii. Claim 16:

Applicants' arguments:

Applicants respectfully submit that claim 16 is directed to the useful result of "integrating data between a plurality of software applications."

Examiner's response:

Claim 16 is a method claim. The Examiner's interpretation of this claim is that it does not expressly require performance of any of the steps by a machine, such as a general purpose digital computer. Structure will not be read into the claim for the purposes of the statutory subject matter analysis even though the steps might be capable of being performed by a general purpose digital computer.

Statutory subject matter requires two things: 1) it must be in the "technological arts;" and, if it is, 2) it must not fall within one of the exceptions for "laws of nature, physical phenomena and abstract ideas." Under the most recent Federal Circuit cases, transformation of data by a machine (e.g., a computer) is statutory subject matter provided the claims recite a "practical application, i.e., 'a useful, concrete and tangible result.'" State Street Bank & Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998).

Claim 16 does not expressly require performance by a computer.

b. Rejection of claims 1-25 under 35 U.S.C. § 102(e):

**Claim 1**

In response to Applicants' arguments (p. 15, last ¶), Applicants' attention is directed to the discussion in ¶ 10 of this Office action.

**Claim 14**

In response to Applicants' arguments (p. 16, first ¶), Applicants' attention is directed to the discussion in ¶ 10 of this Office action.

**Claim 15**

In response to Applicants' arguments (p. 16, second ¶), Applicants' attention is directed to the discussion in ¶ 10 of this Office action.

**Claim 16**

In response to Applicants' arguments (p. 16, third ¶ and p. 17, first ¶), Applicants' attention is directed to the discussion in ¶ 10 of this Office action.

**Claim 21**

In response to Applicants' arguments (p. 17, second ¶), Applicants' attention is directed to the discussion in ¶ 10 of this Office action.

In view of the foregoing discussion, rejections of claims 1-20 under 35 U.S.C. § 101 and of claims 1-25 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,289,500 to Baxter et al. ("Baxter") are maintained and reproduced hereinafter for Applicants' convenience.

***Claim Rejections – 35 USC § 101***

6. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1, 14 and 15 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1, 14 and 15 are not limited to “a practical application of an abstract idea which produced a useful, concrete, and tangible result.” State Street Bank & Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998).

Specifically, the claims are directed to an architecture, a factory system and domain application for integrating data between a plurality of software applications comprising a domain object superclass, a plurality of first-level subclasses of the domain object superclass, a service providing an operation and a domain application. This architecture, factory system and domain application are being interpreted to be software components, e.g., software program per se. Applicants thus fail to disclose that these software components are tangibly embodied and executed by a piece of hardware and that their functions have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

On this basis, claims 1, 14 and 15 are rejected under 35 U.S.C. § 101.

Claims 2-13, which depend from claim 1, are therefore rejected for the same reasons.

8. Claim 16 is rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

While the claim is in the technological arts, it is not limited to “a practical application of an abstract idea which produced a useful, concrete, and tangible result.” State Street Bank & Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998).

Specifically, the claim is directed to a method for integrating data between a plurality of software applications comprising providing a domain object superclass, providing first-level sub-classes of the domain object superclass, providing a service and performing an operation related to the domain object. These method steps do not

appear to have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

On this basis claim 16 is rejected under 35 U.S.C. § 101.

Claims 17-20, which depend from claim 16, are therefore rejected for the same reason.

Correction is required.

### *Claim Rejections – 35 U.S.C. § 102*

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language

10. Claims 1, 14, 15, 16 and 21 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,289,500 to Baxter et al. (“Baxter”).

### **Claims 1, 14, 15, 16 and 21**

Baxter discloses at least:

*a factory system comprising*

*a domain object superclass* (see at least Figure 10, “Domain Item Creator”

and related discussion in the specification);



*a plurality of first-level subclasses of the domain object superclass, an instantiation of one of the plurality of first-level subclasses corresponding to a domain object, the domain object representing an item in a factory (see at least Figure 10, “Extensible Item Factory,” “Domain Extension” and related discussion in the specification); and*

*a service, the service providing an operation related to the domain object, the service comprising at least one component, each of the at least one component being operable to perform the operation related to the domain object (see at least Figures 6, 9, 10, “ExtensibleItem” and related discussion in the specification); and*

*a domain application comprising:*

*an implementation of one component of the at least one component of the service of the factory system to perform the operation related to the domain object (see at least Figure 10, “Domain Extension” and related discussion in the specification).*

## **Claim 2**

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the domain application is one of a group consisting of the following:*

*a legacy system (see at least Figure 2, “DomainSpecificExtensibleItemFactory”; Figure 5, “PickableOrderItem”; and related discussion in the specification); and*

*an integrated application (see at least Figure 2, “ExtensibleItemFactory”; Figure 5, “PickableExtension”; and related discussion in the specification).*

## **Claims 3, 17 and 22**

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the domain application corresponds to an integrated application comprising:*

*a second-level subclass of one first-level subclass of the plurality of first-level*

*subclasses of the domain object superclass of the factory system, an instantiation of the second-level subclass corresponding to an application-specific domain object (see at least Figure 10, “ExtensibleItemCollectionDefault,” “ExtensibleItemSpecialFactory” and related discussion in the specification); and*

*the implementation of the one component corresponds to a method of the application-specific domain object, wherein the method is operable to perform the operation on the application-specific domain object, wherein the performing the operation on the application-specific domain object enables the domain object to communicate as if the operation were performed on the domain object (see at least Figure 10, “4:createExtensibleItem(),” “9:createExtensionItem(),” and related discussion in the specification).*

#### **Claims 4, 18 and 23**

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the domain application corresponds to a legacy system comprising:*

*a data structure corresponding to the domain object (see at least ; and*  
*the implementation of the one component corresponds to an interface to the legacy system, wherein the legacy system is operable to perform the operation on the data structure (see at least Figure 10, “ExtensibleItemCollectionForDomainInterface” and related discussion in the specification).*

#### **Claim 5**

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the operation comprises a plurality of operations (see at least Figure 10, “Extension(),” “createExtensibleItem(),” “getSpecialFactory(),” etc., and related discussion in the specification).*

**Claim 6**

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the operation comprises a plurality of services* (see at least Figure 10, “Extension(),” “createExtensibleItem(),” “getSpecialFactory(),” etc., and related discussion in the specification).

**Claim 7**

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein each component of the at least one component of the service has a corresponding domain application providing an implementation of the component* (see at least Figure 10, “Domain Extension” and related discussion in the specification).

**Claims 8, 19 and 24**

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the service includes instructions for selecting a component of the at least one component to perform the operation, the selecting providing a selected component; and the selected component includes instructions to perform the operation* (see at least Figure 10, step 6: “locateCorrectCollectionUsingExtensionId()” and related discussion in the specification).

**Claim 9**

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein a component of the at least one component is an interface to the domain application* (see at least Figure 10, “ExtensibleItemCollectionForDomainInterface” and related discussion in the specification).

### **Claims 10, 20 and 25**

The rejection of base claim 1 and intervening claim 9 is incorporated. Baxter further discloses *wherein a requesting component of the at least one component includes instructions to use the interface to request the domain application to provide data to a receiving component of the at least one component; and the receiving component includes instructions to receive the data from the domain application via the interface* (see at least Figure 10, “ExtensibleItemCollectionForDomainInterface” and related discussion in the specification).

### **Claim 11**

The rejection of base claim 1 and intervening claims 9-10 is incorporated. Baxter further discloses *wherein the receiving component and the requesting component are the same* (see at least Figure 10, “ExtensibleItemSpecialFactory” in step “5:getExtensionId()” and related discussion in the specification).

### **Claim 12**

The rejection of base claim 1 and intervening claims 9-10 is incorporated. Baxter further discloses *wherein the receiving component further includes instructions to perform the operation on the domain object* (see at least Figure 10, “ExtensibleItemSpecialFactory” performing step “6:locateCorrectCollectionUsingExtensionId()” on “Object Environment”; and related discussion in the specification).

### **Claim 13**

The rejection of base claim 1 is incorporated. Baxter further discloses *a system manager for managing hardware and software in the factory* (see at least discussion related to “Framework” in the specification).

### ***Conclusion***

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu “Antony” Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday-Friday, 6:45 to 16:45.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner’s supervisor, Tuan Dam can be reached at (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Anthony Nguyen-Ba". The signature is written in a cursive, flowing style with a horizontal line extending to the right.

**ANTONY NGUYEN-BA  
PRIMARY EXAMINER**

Art Unit 2122

January 18, 2005